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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,059	10/02/2003	Kohei Kato	056205.50339C1	7754

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EXAMINER

THOMAS, COURTNEY D

ART UNIT PAPER NUMBER

2882

DATE MAILED: 04/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/676,059

Applicant(s)

KATO ET AL.

Examiner

Courtney Thomas

Art Unit

2882

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/2/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 1, 2, 4, 5, 9, 11, 13 and 15 are objected to because of the following informalities:
2. Claim 1, lines 1 and 2 recite:
3. “A multi-leaf collimator comprising leaf plate driving bodies, each including a plurality of movable leaf plates and provided respectively on **one side and the other side ...**”
4. Examiner notes that the use of the phrase “the other side” lacks antecedent basis. The first few lines do not properly set for the structure of the device, since it is unclear what is meant by: “on one side and the other side.”
5. Claim 1, lines 3-6 continues: “... the plurality of leaf plates of **said leaf plate driving body on one side** and the plurality of leaf plates of **said leaf plate driving body on the other side** being disposed in an opposing relation to form an irradiation field of a radiation beam between the opposing leaf plates ...”
6. Examiner notes that claim 1, lines 3-6, conveys a clearer illustration of the claimed structure. However, Examiner notes that the phrase “said leaf plate driving body” implies a singular element, while lines 1 and 2 suggests the presence of more than one. Examiner notes that in the case of a multi-leaf collimator have **two** leaf plate driving bodies, the phrase “said leaf plate driving body” (on the one side and said leaf plate driving body on the other side being disposed in an opposing relation to form an irradiation field of a radiation beam between the opposing leaf plates) would not cause ambiguities related to antecedence or agreement between the number of elements recited in the claim.

Art Unit: 2882

7. Examiner suggests that claim 1, lines 9 and 10, be rewritten as follows: "... portion provided respectively at each of said plurality of leaf plates, and a driving force transmitting/cutoff device for transmitting a driving force..."
8. Claim 1, lines 12 and 13 recite: "... moving said plurality of gear portions **along the other direction across said one direction** and engaging them with said rotating device ..."
9. Examiner notes there is no antecedence for the phrase " the other direction." Examiner additionally notes the phrase "along the other direction across said one direction" is unclear.
10. Examiner suggests that claim 1, line 15 be rewritten as follows: "... gear portion of said selected leaf plate [with] from said rotating device."
11. For brevity, Examiner notes the aforementioned objections are applicable to independent claims 2, 4, 5, 9, 11, 13 and 15.
12. Appropriate correction is required.

Double Patenting

13. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

14.

Art Unit: 2882

15. Claims 1-15 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No. 09/943,385. Although the conflicting claims are not identical, they are not patentably distinct from each other because Copending Application 09/943,385 claims a) a multi-leaf collimator having leaf plate driving bodies, each including a plurality of movable leaf plates; the plurality of leaf plates disposed in an opposing relation to form an irradiation field of a radiation beam between the opposing leaf plates; wherein each of said leaf plate driving bodies comprises one rotating device for engaging with the plurality of leaf plates; and a driving force transmitting/cutoff device for transmitting a driving force of the rotating device (contrast independent claims 1, 2, 13 and 14 of co-pending application 09/943,385 with independent claims 1, 2, 9 and 11 of instant application 10/676,059) and b) a medical system including an accelerator comprising a multi-leaf collimator as described above (contrast independent claims 4, 5, 6, 7, 16 and 17 of co-pending application 09/943,385 with independent claims 4, 5, 13 and 15 of instant application 10/676,059).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Courtney Thomas whose telephone number is (571) 272-2496. The examiner can normally be reached on M - F (9 am - 5 pm).

Art Unit: 2882

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on (571) 272 2490. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CT

Courtney Thomas

A handwritten signature in black ink, appearing to read 'Ed Glick', with a long horizontal line extending to the right.

EDWARD J. GLICK
SUPERVISORY PATENT EXAMINER